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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,116	10/02/2003	Seong Woon Kim	123056-05004412	6033

43569	7590	03/21/2006

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EXAMINER
STIGLIC, RYAN M

ART UNIT	PAPER NUMBER
2112	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 January 2006</u>.

2a)☒ This action is **FINAL**.　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-9</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>02 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-9 are pending and have been examined.

2.   Claims 1-9 are rejected.

Response to Arguments

3.   Applicant's arguments filed January 24, 2006 have been fully considered but they are not

persuasive. In response to applicant's arguments (page 5) that Phillbrick et al. does not teach

constructing the data in the form of a packet, paragraph [0089] discloses a situation where a

client device (connected to the network) request information from a peripheral memory of the

server. The INIC of Phillbrick gathers the requested information and then sends the data to the

client in packetized form with prepended headers.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

5.   Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention. Claim 1 states that the TOE constructs "data in the form of a packet <u>including the</u>

<u>creation of a packet header</u>" however the specification does not support this limitation. The

specification merely states data is "transferred in the form of packets with <u>various information</u>

<u>required for network transmission</u> (page 12, paragraph [0060])." Nowhere in the specification is

there any mention of the data packet explicitly containing a header.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillbrick et al.

(US20010037406A1).

For claim 1, Phillbrick discloses:

A network-storage apparatus (Fig. 1, 'INIC' 22; paragraph [0042]) for high-speed streaming data

transmission through a network, the network-storage apparatus processing the streaming data for

a plurality of disc storages of an Internet server computer system and a network apparatus, the

apparatus comprising:

- an internal peripheral device bus separated from a peripheral device bus outside the

   network-storage apparatus, for transmitting data between devices inside the network-

   storage apparatus (Fig. 1, 48; [0043]);

- a peripheral device bus bridge for transferring bus transaction from a host processor to the internal peripheral device bus and transferring bus transaction for a host processor executing inside the network-storage apparatus or a main memory to a bus bridge (Fig. 1, 50; [0043]);

- a disk controller for controlling a plurality of disc storage connected to the network-storage apparatus and managing reading and writing data from and to the disc storage (Fig. 1, 72; [0045]);

- a peripheral memory for storing transmitted data between the disc storage and the network (Fig. 1, 46; [0043]);

- a peripheral memory controller for controlling the peripheral memory and storing or outputting the transmitted data between the disc storage and the network ([0053]; and

- a TOE for reading data to be transmitted to the network from the peripheral memory, constructing the data in the form of a packet including the creation of a packet header ([0089] discloses a situation where a client on the network requests data stored in a peripheral memory of the server and the INIC gathers the information and sends the data packets to the client with prepended headers "it created based on the server CCB"), transmitting the packet to the network, and storing the data received from the network in the peripheral memory through the peripheral memory controller (Fig. 1, items 52,58,60; [0043-0062]).

For claim 2, Phillbrick discloses:

The apparatus of claim 1, wherein the peripheral device bus is a PCI bus and the peripheral

device bus bridge roles a PCI bridge ([0066]).

For claim 3, Phillbrick discloses:

The apparatus of claim 1, wherein the disk controller is connected to a plurality of disc storages

in parallel through a disk interface bus and accesses to the data in a pipeline manner ([0111-

0113]).

For claim 4, Phillbrick discloses:

The apparatus of claim 1, wherein the disk controller reads and writes data from and to a

plurality of disc storages in a stripping manner ([0044-0045] Where stripping is a form of RAID

clearly covered by the scope of the word RAID).

For claim 5, Phillbrick discloses:

The apparatus of claim 1, wherein the peripheral memory controller constructs a memory table

so as to cache data transmitted from and to the network ([0045-0046,0055,0059-0060,0110]

etc.).

For claim 6, Phillbrick discloses:

The apparatus of claim 1, wherein the peripheral memory controller is provided a register for

indicating size of the peripheral memory inside the peripheral memory controller, and transmits a

great deal of data in a DMA manner ([0110,0052-0053]).

For claim 7, Phillbrick discloses:

The apparatus of claim 1, wherein the peripheral memory controller deletes contents of a memory table thereof when finishing accessing to the peripheral memory ([0045-0046,0055,0059-0060,0110]).

For claim 8, Phillbrick discloses:

The apparatus of claim 1, wherein the TOE creates a DSB table having information on packet data to be transferred to the disk immediately among data packets received from the network, transmitting a data packet to the peripheral memory to store the data packet if the data packet storable in the disk has information matching DSB, and transmitting a data packet to a general network stack otherwise ([0043-0062]).

For claim 9, Phillbrick discloses:

The apparatus of claim 1, wherein the TOE reads data to be transmitted to the network from the peripheral memory, constructs the data in the form of a packet and transfers the data packet to the network when the data to be transmitted is stored in the peripheral memory and the TOE receives a data transmission instruction from a host processor ([0043-0062]).

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ryan M. Stiglic whose telephone number is 571.272.3641. The

examiner can normally be reached on Monday - Friday (6:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rehana Perveen can be reached on 571.272.3676. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMS

PAUL R. MYERS
PRIMARY EXAMINER